NJDOT Bureau of Research
QUARTERLY PROGRESS REPORT

Project Title:	Technology Transfer
RFP NUMBER: NA	NJDOT RESEARCH PROJECT MANAGER: Nick Vitillo
TASK ORDER NUMBER:: RF-CUNY 24-01	PRINCIPAL INVESTIGATOR: Robert Paaswell
Project Starting Date: 01-01-04 Original Project Ending Date: 12-31-04 **Modified Completion Date:**	Period Starting Date: 10-01-04 Period Ending Date: 12-31-04

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Lecture Series	15%	33%	100%	15%
Research Newsletter	15%	100%	100%	15%
NJDOT Annual Report	10%	0%	0%	0%
US DOT Reporting Requirements (Annual Report, Semi-Annual Report, etc…)	25%	50%	100%	25%
Publication & Distribution of Research Papers	10%	50%	100%	10%
Process Request for Proposals	15%	100%	100%	15%
Participate in Conferences	10%	20%	60%	6%
Total	100%			86%

Project Objectives:
The objectives of the Technology Transfer program are:

- To increase the awareness and level of information concerning transportation issues facing US DOT Region 2 for all within the region;
- To improve the knowledge base and approach to problem solving of the region's transportation workforce, from those operating the systems to those at the most senior levels of managing the system; by doing so, to improve the overall professional capability of the transportation workforce;
- To stimulate discussion and debate concerning the integration of new technologies into our culture, our work and our transportation systems;
- To provide the more traditional but extremely important job of dissemination of research and project reports, studies, analysis and use of tools to the education, research and practicing community;
- To provide unbiased information and testimony to decision-makers concerning regional transportation issues consistent with the UTRC theme.

Project Abstract:
The goal of the Technology Transfer Program for the New Jersey Department of Transportation is to provide research results to potential users in a form that can be directly implemented, utilized and applied to transportation operations.

NJDOT Bureau of Research
QUARTERLY PROGRESS REPORT

Project Title:	Identification of Traffic Control Devices for Mobile and Short Duration Work Operations
RFP NUMBER: Project 2003-27	NJDOT RESEARCH PROJECT MANAGER: Ed Kondrath
TASK ORDER NUMBER:: RFCUNY 23-01	PRINCIPAL INVESTIGATOR: Robert E. Paaswell, Ph.D.
Project Starting Date: 01/01/04 **Original** Project Ending Date: 12/31/04 **Modified Completion Date: 3/31/05**	Period Starting Date: 10/01/04 Period Ending Date: 12/31/04

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Literature Search	25%	100%	100%	25%
Task 1: Develop methodology and criteria for evaluating devices	12%	100%	100%	12%
Task 2: Analyze NJDOT practices for work zone operations	8%	100%	100%	8%
Task 3: Identify guidelines to eliminate driver inattentiveness	5%	50%	100%	5%
Task 4: Identify alternative techniques for traffic control	4%	0%	100%	4%
Task 5: Prepare guidelines	2%	0%	100%	2%
Task 6 (Mod): SHRP Presentation	10%	2%	2%	2%
Final Report and Implementation	34%	70%	80%	27%
TOTAL	100%			85%

Project Objectives:
The overall objective of this research project is to study mobile work zone safety with particular attention to the identification of work zone safety devices, information systems for the reduction of safety and congestion, and implementation of innovative techniques to reduce delays and crashes due to work zones. The specific objectives are to:

- Provide improvements for maximum protection of the motoring public and workers in the work zone and in the set up of the work zone,
- Identify state-of-the art work zone technologies to improve worker safety in mobile work zone and short term maintenance operations,
- Identify information systems for work zone traffic control to reduce delays and crashes,
- Meet the current standards established by internal policies of the NJDOT,
- Identify “best practices” for the use of law enforcement to improve work zone safety,
- Identify key issues to be considered from public outreach and information systems.

Project Abstract:
This research will include the identification of potential technologies and information systems, evaluation of the identified devices and systems with appropriate maintenance yards and crews, and the parathion of specifications and Baseline Document Change papers for adoption by the NJDOT. Potential technologies and information systems will be identified from the NJDOT New Technologies and Products database of approved and under evaluation products, Transportation Research Board and National Cooperative Highway Research Program reports, international sources, Strategic Highway Research Program reports, other State DOT correspondence, and manufacturers and vendors. The identified technologies and information systems will be researched to obtain users and technical information on their effectiveness.

1. Progress this quarter by task:

The research team met with the NJDOT engineers and Rod Roberson of Rutgers University to discuss the development of the New SHRP equipment, and the demonstration of this equipment in New Jersey. The UTRC received the extension of Time and Budget Modification for the Rutgers work. Rutgers is preparing a proposal to present information about this equipment to the engineers for the purpose of funding a complete demonstration. The NJDOT elected to proceed with the demonstration of SHRP in place of the field evaluation of other safety equipment.

2. Proposed activities for next quarter by task:

- Rutgers University will prepare a presentation and demonstration of the new SHRP equipment. Initial contacts will be made with Caltrans.
- The final report will be completed to document the previous tasks reported in the working papers and the Rutgers University work.

3. List of deliverables provided in this quarter by task (product date)

A presentation was prepared to document the completed working papers and present the results and findings to the NJDOT and the preliminary final report was completed to document the previous working papers and completed work. This presentation and report do not document the Rutgers work which will be completed in March 2005.

4. Progress on Implementation and Training Activities

NA

5. Problems/Proposed Solutions

None

Total Project Budget	$72,294
Modified Contract Amount:	
Total Project Expenditure to date	$61,450.
% of Total Project Budget Expended	85%

1. Progress this quarter by task:

- The UTRC attended NJDOT Quarterly report meetings and a budget meeting to discuss invoices.
- The UTRC met with the NJDOT on November 9, 2004 to discuss the 2005 Technology Transfer proposal and work. In response to that meeting the UTRC will instruct all Principal Investigators to prepare a presentation of their research work to be presented to the NJDOT at the completion of their project; develop a seminar on reinforced fiber polymer concrete from ISIS Canada Research Network; develop a seminar on transportation security; prepare a NJDOT annual report; and develop a marketing and motivational seminar for NJDOT employees.
- The UTRC published and forwarded NJDOT final reports to the USDOT.

2. Proposed activities for next quarter by task:

- The UTRC has offered to assist the NJDOT with short term technical projects and provide experts to present timely topics to interested NJDOT engineers. The UTRC is able to participate in TRB, NCHRP Panels and other such activities where the NJDOT may not have sufficient staff
- The UTRC will develop the technology program as outlined in the November 9, 2004 meeting.
- A meeting will be held with NJDOT research staff to discuss the Annual Research Report.

3. List of deliverables provided in this quarter by task (product date)

US DOT Annual Report

4. Progress on Implementation and Training Activities:

NA

5. Problems/Proposed Solutions

NA

Total Project Budget	$69,629
Modified Contract Amount:	
Total Project Expenditure to date	$41,800.
% of Total Project Budget Expended	60%